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## Appendix II

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The localized effects will differ by location, depending on a) the expected change in visitation to the specific site, b) the amount of visitor-oriented business activity occurring in surrounding communities, c) the nature of the proposed ATS system construction and operation, and d) the size and diversity of the county economic base (as a source of suppliers for related goods and services). These localized effects are illustrated through five examples.

For each of these examples, specific counties surrounding (or adjacent to) the federally-managed sites and their gateway communities were identified. Counties included in the analysis were those impacted economically by site visitation. The indirect and induced effects on those local counties were then calculated using county-specific IMPLAN models. These IMPLAN models provide different estimates of local (county) impacts for each site by accounting for the following factors:

- The levels of business activity to be supported in each county will differ depending on the nature of the ATS spending and the projected change in visitor spending. Those projects requiring less equipment and more operators, and those projects with larger ATS impacts on visitation will also tend to have larger local job impacts.
- The levels of business activity to be supported in each county will also differ depending on the portion of total spending which goes to local firms, as opposed to suppliers outside the county. Those counties with larger and more diverse business sectors will tend to keep more of the business sales for goods and services suppliers within the county.

The level of income generated in each county will further differ depending on the average wage levels in that county. Those counties with higher wage rates will also provide more income per job.

***Chincoteague National Wildlife Refuge and Assateague National Seashore (Accomack County, Virginia)*** – One potential proposal for Chincoteague National Wildlife Refuge includes tram service between the town, the visitor center, and the beach. The beach is currently operating below its carrying capacity on peak days because of parking constraints. The proposed improvements would allow the site to serve an additional 24,000 visitors and, as shown in Table A.3, would result in \$1.2 million in new visitor spending yearly dependent on the availability of local accommodations. This increased demand for food, lodging, and retail purchases could expand local business sales (including indirect and induced effects) by almost \$1.7 million, providing 47 jobs and a potential net growth of \$640 million in local income. The ATS operations and maintenance activities could lead to an additional \$132,000 in county-wide business sales, providing roughly three new jobs and a net growth of \$63,000 in local income. One-time capital expenditures could generate a further \$1.3 million in local business sales, providing \$436,000 in local personal income (with the equivalent of 17 local jobs for one year).

**Table A.3 ATS at Chincoteague National Wildlife Refuge**  
*Potential Local Economic Impacts on Accomack County, Virginia*

Category	Direct Program Effect	Total Effect on County Economy		
		Output	Employment	Income
One-Time Capital Expenditures	\$2,924,000	\$1,283,000	17	\$436,000
Annual Operations & Maintenance	\$ 215,000	\$ 132,000	3	\$ 63,000
Annual Visitor Spending	\$1,200,000	\$1,680,000	47	\$640,000

All estimates are in 1999 dollars and are not adjusted for inflation; the total effects were calculated using county-level IMPLAN model.

**Salem Maritime Historic Site (Essex County, Massachusetts)** – An ATS proposal for Salem includes establishment of a water ferry route connecting Boston and Salem. The availability of ferry service could result in 25,000 new visitors and over \$1 million of visitor spending annually in the Salem area. Of these visitors, 80 percent are expected to come from outside Essex County and many of them are expected to spend at least one night in the Salem area, thus increasing the demand for local restaurant, retail, and lodging services. In all, activity associated with tourist spending plus operation of ferry facilities will generate an additional \$2.2 million of business sales, providing over 40 jobs with a net growth of almost \$1 million in personal income (see Table A.4). One-time capital investment in construction of facilities and purchases of boats will also generate \$2.7 million in business sales, providing over \$1.1 million in local personal income (with the equivalent of another 32 local jobs for one year).

**Table A.4 ATS at Salem Maritime Historic Site**  
*Potential Local Economic Impacts on Essex County, Massachusetts*

Category	Direct Program Effect	Total Effect on County Economy		
		Output	Employment	Income
One-Time Capital Expenditures	\$4,867,000	\$2,702,000	32	\$1,129,000
Annual Operations & Maintenance	\$ 370,000	\$ 467,000	6	\$ 180,000
Annual Visitor Spending	\$1,090,000	\$1,720,000	36	\$ 730,000

All estimates are in 1999 dollars and are not adjusted for inflation; the total effects were calculated using county-level IMPLAN model.

***Merritt Island National Wildlife Refuge/Canaveral National Seashore (Brevard County, Florida)*** – An ATS proposal for Merritt Island National Wildlife Refuge includes two new shuttle buses and one new water ferry. These improvements will allow the site to serve over 20,000 more visitors per year. Although a majority of these new visitors will be day-trippers and thus generate less in the way of “new” economic activity, it is estimated 20 percent of the new visitors will be non-locals staying overnight, whose spending will generate new business sales in the county. In all, new “non-local” visitors plus ATS operations will together generate nearly \$1.7 million in business sales, providing roughly 39 jobs with a net growth of \$725,000 in local income (see Table A.5). One-time capital investment in the buses, vessels and ferry facilities will also generate nearly \$2.9 million in business sales, providing almost \$1.1 million in local personal income (with the equivalent of another 36 jobs for one year).

**Table A.5 ATS at Merritt Island National Wildlife Refuge/  
Canaveral National Seashore**  
*Potential Local Economic Impacts on Brevard County, Florida*

Category	Direct Program Effect	Total Effect on County Economy		
		Output	Employment	Income
One-Time Capital Expenditures	\$3,667,000	\$2,850,000	36	\$1,092,000
Annual Operations & Maintenance	\$ 270,000	\$ 220,000	4	\$ 105,000
Annual Visitor Spending	\$1,000,000	\$1,460,000	35	\$ 620,000

All estimates are in 1999 dollars and are not adjusted for inflation; the total effects were calculated using county-level IMPLAN model.

***Chiricahua National Monument (Cochise County, Arizona)*** – A shuttle bus system proposed for Chiricahua National Monument is expected to bring 42,000 new visitors to the site annually. These visitors, the majority of whom will be campers, could spend up to \$2.3 million in the local area (see Table A.6). In all, spending by the additional visitors, along with the economic impacts of the new transit system could together generate over \$3.4 million in business sales, provide up to 113 jobs and a net growth of nearly \$1.3 million in local income. One-time capital investments include \$400,000 in vehicle costs. Since there are no locally purchased capital items, business sales are zero.

**Table A.6 ATS at Chiricahua National Monument**  
*Potential Local Economic Impacts on Cochise County, Arizona*

Category	Direct Program Effect	Total Effect on County Economy		
		Output	Employment	Income
One-Time Capital Expenditures	\$ 400,000	\$ 0	0	\$ 0
Annual Operations & Maintenance	\$ 220,000	\$ 84,000	3	\$ 35,000
Annual Visitor Spending	\$2,350,000	\$3,320,000	110	\$1,250,000

All estimates are in 1999 dollars and are not adjusted for inflation; the total effects were calculated using county-level IMPLAN model.

**Gettysburg National Military Park (Adams County, Pennsylvania)** – The ATS proposal for Gettysburg is part of a larger park enhancement program which also includes a new, expanded visitor center. The ATS part of that program involves two shuttle bus services – one to take visitors from the visitor center to downtown Gettysburg, and a second to circulate around the park area. The visitor center and shuttle services are intertwined, so it is not possible to assign proportional credit to any of these components alone.

Overall, the addition of these services is expected to add 150,000 more visitors each year, as well as increase the average length of stay and amount of spending for the existing base of visitors. As shown in Table A.7 these factors will lead to an increase of over \$23 million in visitor spending in the Gettysburg area. In all, new visitors plus ATS operations will together generate over \$32 million in business sales, providing roughly 800 jobs with a net growth of over \$12.8 million in local income. One-time capital investment for the ATS alone will generate another \$816,000 of business sales, providing \$333,000 in local personal income (with the equivalent of another 11 jobs for one year).

**Table A.7 ATS at Gettysburg National Military Park**  
*Potential Local Economic Impacts on Adams County, Pennsylvania*

Category	Direct Program Effect	Total Effect on County Economy		
		Output	Employment	Income
One-Time Capital Expenditures	\$ 1,780,000	\$ 816,000	11	\$ 333,000
Annual Operations & Maintenance	\$ 295,000	\$ 294,000	7	\$ 143,000
Annual Visitor Spending	\$23,460,000	\$31,870,000	790	\$12,670,000

All estimates are in 1999 dollars and are not adjusted for inflation; the total effects were calculated using county-level IMPLAN model.

The specific examples above are meant for illustrative purposes only. With the exception of the Gettysburg National Military Park, none of the alternatives identified have been through a formal planning/project development process. However, the analysis clearly indicates that: 1) there would be a favorable overall economic impact from implementing transit; and 2) at sites where additional visitors can be accommodated, but additional automobiles cannot, implementation of ATS can provide communities with economic benefits, including increased income and employment.